

metal center prong on the inner side of the vest at the center of the back of the neck. This snap **302** is placed into a corresponding receptacle at the base of the neck on the upper back of the cystic fibrosis version of the doll. Two tubes **303** connect to the front of the vest on the right and left sides of the lower rib cage area. The tubes **303** may be composed of flexible plastic, or any other suitable material, and are scaled appropriately for the doll and vest. Preferably, the tubes are approximately 15" in length and 1" in diameter. The opposite ends of both tubes **303** connect to a power unit **304**. The power unit **304** may be made of plastic or any other suitable material. It may contain a decal **305** for labeling, and is approximately.

**[0098]** To simulate the effects that a child feels when using a real medical vest, the cystic fibrosis version of the chronic illness doll contains a motor (not shown) in the doll's central body cavity, which will cause the doll to shake when activated. To trigger the shaking, the vest **300** must be snapped to the doll at the back of the neck, this completes an electrical circuit confirming that the vest **300** has been placed on the doll. The cystic fibrosis version of the doll, in this embodiment, also contains a contact sensor (not shown) in the left hand of similar design as the contact sensor **50** (see **FIG. 4**) in the right hand. Once the vest **300** is snapped into place, the depression of the doll's left hand will cause the doll to shake for a specific number of seconds. A vibratory motor (not shown) or other means used to produce the shaking can use any means known to those skilled in the state of the art. In another embodiment, a button (not shown) on the power unit **304** or on the vest **300** itself may be depressed to begin the shaking motion. Any electrical circuitry required within the doll or within the vest **300**, tubes **303** and power unit **304** to relay a signal between the contact sensor to the doll's microprocessor **44** (see **FIG. 4**) can be selected by one skilled in the art without undue experimentation.

**[0099]** In another embodiment, the vest may be designed to inflate a layer of air to further simulate the performance of a real medical vest, with the source of air being external, or designed to emanate from either the doll or the power unit **304**. The vest **300** may also contain a microchip (not shown) as part of the passively coupled RF system such that the doll will "recognize" the vest when it is in close proximity to the body cavity RF sensor and respond with the audible phrase specifically for this piece of equipment. The complexity of the mechanics of the vest may be decreased to reduce production costs, or increased to produce a more realistic simulation as a manufacturer skilled in the art may desire.

We claim:

1. An interactive toy for use in learning about chronic illnesses comprising: a doll having an inner and outer surface, an internal proximity switch; one or more internal electrical wires connecting said internal proximity switch to an internal microprocessor; and an audio speaker connected to said internal microprocessor, wherein upon activation of the microprocessor, said doll produces a programmed response.

2. The toy of claim 1, wherein said programmed response is representative of a chronic illness.

3. The toy of claim 2, wherein said chronic illness is selected from the group consisting of: asthma, allergies, cystic fibrosis, and diabetes.

4. The toy of claim 1, wherein said programmed response is selected from the group consisting of: coughing sounds, wheezing sounds, speech, heart sounds, bowel sounds, breathing, lung sounds, audible sound, heat emission, light emission, and motion.

5. The toy of claim 1, further comprising pseudo-medical equipment having an activator which closes said internal proximity switch when brought into proximity with the doll, thereby completing an internal electrical circuit between said internal proximity switch and said internal microprocessor.

6. The toy of claim 5, wherein said activator comprises a magnet.

7. The toy of claim 5, wherein said pseudo-medical equipment is selected from the group consisting of: a medicine dropper bottle, a nose sprayer, a syringe, a simulated patient chart, a stethoscope, a peak flow meter, an inhaler, a nebulizer, a glucose meter, a lancet, an insulin syringe, a blood pressure cuff, feeding and intravenous lines, a medicine bottle, a nose sprayer, a medical bracelet, an eye dropper, and a cystic fibrosis vest.

8. The toy of claim 1, further comprising a book containing text, wherein the text of said book is programmed into said microprocessor such that upon activation of said microprocessor, said doll produces audible sound corresponding to the text of said book.

9. An interactive toy for use in learning about chronic illnesses comprising: a doll having an inner and outer surface, an internal radio receiver, one or more internal electrical wires connecting said internal radio receiver to an internal microprocessor; and an audio speaker connected to said internal microprocessor, such that upon receipt of a radio signal by said internal radio receiver, said signal is processed by said microprocessor to generate a programmed response.

10. The toy of claim 9, wherein said programmed response is representative of a chronic illness.

11. The toy of claim 10, wherein said chronic illness is selected from the group consisting of: asthma, allergies, cystic fibrosis, and diabetes.

12. The toy of claim 9 wherein said programmed response is selected from the group consisting of: coughing sounds, wheezing sounds, speech, heart sounds, bowel sounds, breathing, and lung sounds, audible sound, heat emission, light emission, and motion.

13. The toy of claim 9 further comprising pseudo-medical equipment having means for emitting radio signals, whereby said radio receiver scans for said signals, receives said signals, and activates said microprocessor to generate a programmed response.

14. The toy of claim 13, wherein each unique item of said pseudo-medical equipment emits a unique radio signal such that, upon receipt of said signal by said internal radio receiver, said unique item is individually recognized by said internal microprocessor to generate a unique programmed response.

15. The toy of claim 13, wherein said pseudo-medical equipment is selected from the group consisting of: a medicine dropper bottle, a nose sprayer, a syringe, a simulated patient chart, a stethoscope, a peak flow meter, an inhaler, a nebulizer, a glucose meter, a lancet, an insulin syringe, a blood pressure cuff, feeding and intravenous lines, a medicine bottle, a nose sprayer, a medical bracelet, a story book, an eye dropper, and a cystic fibrosis vest.